General

Guideline Title

Recommendations on screening for depression in adults.

Bibliographic Source(s)

Joffres M, Jaramillo A, Dickinson J, Lewin G, Pottie K, Shaw E, Connor Gorber S, Tonelli M, Canadian Task Force on Preventive Health Care. Recommendations on screening for depression in adults. CMAJ. 2013 Jun 11;185(9):775-82. [42 references] PubMed

Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: Macmillan HL, Patterson CJ, Wathen CN. Screening for depression in primary care: recommendation statement from the Canadian Task Force on Preventive Health Care. CMAJ. 2005 Jan 4;172(1):33-5. [13 references]

A complete list of planned reviews, updates and revisions is available under the What's New section at the Canadian Task Force on Preventive Health Care (CTFPHC) Web site .

Recommendations

Major Recommendations

The grades of recommendations (strong, weak) and grades of evidence (high, moderate, low, very low) are defined at the end of the "Major Recommendations" field.

Recommendations on screening for depression in primary care settings are provided for people 18 years of age or older who present at a primary care setting with no apparent symptoms of depression. These recommendations do not apply to people with known depression, with a history of depression or who are receiving treatment for depression.

- For adults at average risk of depression,* the Task Force recommends not routinely screening for depression. (Weak recommendation; very-low-quality evidence)
- For adults in subgroups of the population who may be at increased risk of depression,† the Task Force recommends not routinely screening for depression.‡ (Weak recommendation; very-low-quality evidence)

*The average-risk population includes all individuals 18 years of age or older with no apparent symptoms of depression who are not considered to be at increased risk.

†Subgroups of the population who may be at increased risk of depression include people with a family history of depression, traumatic experiences as a child, recent traumatic life events, chronic health problems, substance misuse, perinatal and postpartum status, or Aboriginal origin.

‡Clinicians should be alert to the possibility of depression, especially in patients with characteristics that may increase the risk of depression, and should look for it when there are clinical clues, such as insomnia, low mood, anhedonia and suicidal thoughts.

Definitions:

Quality of Evidence

Evidence is judged as high quality when the Task Force is highly confident that the true effect lies close to that of the estimate of the effect. For example, evidence is judged as high quality if all of the following apply: there is a wide range of studies included in the analyses with no major limitations, there is little variation between studies, and the summary estimate has a narrow confidence interval.

Evidence is judged as moderate quality when the Task Force considers that the true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different. For example, evidence might be judged as moderate quality if any of the following applies: there are only a few studies and some have limitations but not major flaws, there is some variation between studies, or the confidence interval of the summary estimate is wide.

Evidence is judged to be low or very low quality when the true effect may be substantially different from the estimate of the effect. For example, evidence might be judged as low quality if any of the following applies: the studies have major flaws, there is important variation between studies, or the confidence interval of the summary estimate is very wide.

Grading of Recommendations

- Strong recommendations are those for which the task force is confident that the desirable effects of an intervention outweigh its undesirable effects (strong recommendation for an intervention) or that the undesirable effects of an intervention outweigh its desirable effects (strong recommendation against an intervention). A strong recommendation implies that most people will be best served by the recommended course of action.
- Weak recommendations are those for which the desirable effects probably outweigh the undesirable effects (weak recommendation for an intervention) or undesirable effects probably outweigh the desirable effects (weak recommendation against an intervention) but appreciable uncertainty exists. A weak recommendation implies that most people would want the recommended course of action, but many would not. For clinicians, this means they must recognize that different choices will be appropriate for individual women, and they must help each woman arrive at a management decision consistent with her own values and preferences. Policy-making will require substantial debate and involvement of various stakeholders. Weak recommendations result when the balance between desirable and undesirable effects is small, the quality of evidence is lower, and there is more variability in the values and preferences of patients.

Clinical Algorithm(s)

A clinical algorithm for Screening for Depression in Primary Care is provided as a supplemental tool (see the "Availability of Companion Documents" field).

Scope

Disease/Condition(s)

Depression (including major depressive disorder)

Guideline Category

Prevention

Screening

Clinical Specialty

Family Practice

Internal Medicine

Preventive Medicine

Psychiatry

Psychology

Intended Users

Advanced Practice Nurses

Nurses

Physician Assistants

Physicians

Guideline Objective(s)

- To provide evidence-based recommendations on screening for depression in adults in Canada
- To update the 2005 Canadian Task Force on Preventive Health Care guideline

Target Population

Asymptomatic adults (18 years of age or older)

Note: These recommendations do not apply to people with known depression, with a history of depression or who are receiving treatment for depression.

Interventions and Practices Considered

Routine screening for depression in primary care settings

Major Outcomes Considered

Quality of life
Rates of suicidality (attempts or ideation)
All-cause mortality
Depression-related mortality
Rates of hospital admission
Changes in symptoms of depression (treatment response or remission)

Methodology

Methods Used to Collect/Select the Evidence

Hand-searches of Published Literature (Primary Sources)

Hand-searches of Published Literature (Secondary Sources)

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

Note from the National Guideline Clearinghouse (NGC): A systematic evidence review was prepared by the Evidence Review and Synthesis Centre at McMaster University for the Canadian Task Force on Preventive Health Care (CTFPHC) (see the "Availability of Companion Documents" field).

For Stage 1 of the review, the following electronic databases were searched: Medline, EMBASE, PsycINFO, Cochrane Central and Cochrane Database of Systematic Reviews from 1994 to May 23, 2012. The search was quite broad in nature with the only limitations being date, human subjects and English or French language. In addition, a grey literature search using a number of keyword terms for depression and screening was undertaken focusing on Canadian sources. This included both site specific searching (see Appendix A of the systematic review document) and a general Google search limited to "pages from Canada".

For the contextual questions on depression screening, it was not necessary to undertake a separate search as any results would be a subset of the results of the search for Key Question (KQ) 1 and KQ2. Articles addressing these questions were identified as part of the screening process for the key questions. For contextual questions, three separate searches were conducted in the databases mentioned above: 1) systematic reviews on depression treatment, 2) systematic reviews on adverse events associated with treatment, and 3) patient preferences and values regarding treatment for depression. All these searches were limited to the last 5 years, human subjects and English or French language. Detailed search strategies can be found in Appendix A of the systematic review document.

Number of Source Documents

Five documents

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

Quality of Evidence

Evidence is judged as high quality when the Task Force is highly confident that the true effect lies close to that of the estimate of the effect. For example, evidence is judged as high quality if all of the following apply: there is a wide range of studies included in the analyses with no major limitations, there is little variation between studies, and the summary estimate has a narrow confidence interval.

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Evidence is judged to be low or very low quality when the true effect may be substantially different from the estimate of the effect. For example, evidence might be judged as low quality if any of the following applies: the studies have major flaws, there is important variation between studies, or the confidence interval of the summary estimate is very wide.

Methods Used to Analyze the Evidence

Meta-Analysis of Randomized Controlled Trials

Review of Published Meta-Analyses

Systematic Review with Evidence Tables

Description of the Methods Used to Analyze the Evidence

Note from the National Guideline Clearinghouse (NGC): A systematic evidence review was prepared by the Evidence Review and Synthesis Centre at McMaster University for the Canadian Task Force on Preventive Health Care (CTFPHC) (see the "Availability of Companion

Documents" field).

Quality Assessment, Data Abstraction and Analysis

Each title and abstract was reviewed by two trained screeners and disagreements were resolved by a third screener, any article marked for inclusion by either team member went on to full text rating. Full text inclusion and quality assessment were each done by two people and data abstraction was done by one person and checked by another. All disagreements were resolved through discussion. The inclusion results were reviewed by a third person. The exception to this process were studies related to the contextual questions of costs, performance indicators, patient preferences, and subpopulations, for which abstraction was done by one person and evidence was not rated using the Grading of Recommendation, Assessment, Development and Evaluation (GRADE) system. Five quasi-experimental studies with pre- and post-implementation design were quality appraised with the Newcastle-Ottawa Scale (NOS) measuring the domains: selection of study groups, comparability of study groups, and means of ascertaining exposure or outcome. The NOS uses a 'star system' to score studies (maximum score is nine stars).

The strength of evidence was determined based on the GRADE system of rating quality of evidence using GRADEPro software. This system of grading evidence has been widely used and has been endorsed by over 40 major organizations including the World Health Organization (WHO), Centers for Disease Control and Prevention (CDC), and the Agency for Healthcare Research and Quality (AHRQ). The GRADE system rates the quality of a body of evidence as high, moderate, low or very low; each of the four levels reflects a different assessment of the likelihood that further research will impact the estimate of effect (e.g., high quality: further research is unlikely to change confidence in the estimate of effect). A GRADE quality rating is based on an assessment of five conditions: (1) limitations in study designs (risk of bias), (2) inconsistency (heterogeneity) in the direction and/or size of the estimates of effect, (3) indirectness of the body of evidence to the populations, interventions, comparators and/or outcomes of interest, (4) imprecision of results (few events/observations, wide confidence intervals), and (5) indications of reporting or publication bias. Grouped RCTs begin with a high quality rating which may be downgraded if there are serious or very serious concerns across the studies related to one or more of the five conditions. All groups of observational (e.g., case-control and cohort) studies begin with a low quality rating which may be further downgraded based on assessments of the same five criteria. All other types of evidence are assigned a very low quality rating. For this review, key data were entered into the GRADEPro software along with the quality assessment ratings to produce two analytic products, the GRADE Evidence Profile Tables and the GRADE Summary of Findings Tables.

Review Manager 5.1 was used for meta-analysis. Pooled relative risk (RR) was used to summarize the effect of intervention on suicide (dichotomous outcome). A Random Effect assumption (Inverse Variance Weighting method) was used to calculate pooled estimates and the corresponding confidence intervals. Homogeneity between studies was assessed using the χ^2 test and the I^2 statistic. Heterogeneity was considered significant if the p-value was less than 0.1.

Methods Used to Formulate the Recommendations

Other

Description of Methods Used to Formulate the Recommendations

Note from the National Guideline Clearinghouse (NGC): A systematic evidence review was prepared by the Evidence Review and Synthesis Centre at McMaster University for the Canadian Task Force on Preventive Health Care (CTFPHC) (see the "Availability of Companion Documents" field).

The Canadian Task Force on Preventive Health Care is an independent panel of clinicians and methodologists that makes recommendations about clinical manoeuvres aimed at primary and secondary prevention. Work on each set of recommendations is led by a workgroup of 2 to 6 members of the task force. Each workgroup establishes the research questions and analytical framework for the guideline.

The current work was led by a workgroup of 6 members of the task force, supported by scientific staff at the Public Health Agency of Canada and the University of Alberta (members of the guideline writing group are listed at the end of the original guideline document).

The recommendations were revised and approved by the entire task force and underwent external review by experts in the field and by stakeholders. The systematic review on which the recommendations are based was performed independently by the Evidence Review and Synthesis Centre at McMaster University and the task force used the Grading of Recommendations Assessment, Development and Evaluation (GRADE) system to determine the strength of recommendations.

Analytic Framework and Key Questions

The research questions and analytical framework for this guideline (available in Appendix 1 of the systematic review document) were incorporated into the search protocol.

The Key Questions

Stage 1: Evaluating the evidence for benefits or harms of screening for depression

1. What is the evidence for the benefit of screening for depression in:
    a. Asymptomatic adults 18 years of age or over from the general population in (i) primary care or (ii) other outpatient settings to improve critical outcomes?
    b. Adults at high risk for depression in:
        i. Primary care
        ii. Other outpatient settings
        iii. Specialty clinic setting to improve critical outcomes

2. What is the evidence for the harms of screening for depression in:
    a. Asymptomatic adults 18 years of age or over not at high risk for depression in:
        i. Primary care
        ii. Other outpatient settings
    b. Adults at high risk for depression in:
        i. Primary care
        ii. Other outpatient settings
        iii. Specialty clinics

Stage 2: Evaluating the evidence for accuracy of tools to detect depression in primary care settings

1. What are the depression screening tool(s) that are most effective (accurate) in diagnosing or detecting depression in adult patients in primary care settings?
2. What is the effectiveness of short screening questions tools (ultra-short = 1-4 items and taking less than 2 minutes to complete; short = 5-14 items and 2 to 5 minutes) compared with long screening tools (≥15 items and more than 5 minutes) to screen for depression in primary care settings?

The first stage, which has been completed, looked at the evidence for benefits and harms of screening in adults in both the general population in primary care and in selected patient groups selected by the Depression Screening Working Group that are considered to be at high risk in primary care, and other outpatient settings.

Stage 2 would be undertaken only if the evidence pointed to the benefit of screening for at least some of the population under investigation. This stage would have evaluated the accuracy of tools to detect depression in the primary care setting. Based on the findings of Stage 1, it was decided that evidence was not sufficient to complete Stage 2 of the review.

Contextual Questions

Additional contextual questions in unselected and high risk adult populations in primary care, outpatient and specialty clinic settings previously identified include:

1. What is the evidence concerning the optimal interval of screening for depression?
2. What is the cost-effectiveness of screening for depression?
3. What are the patient preferences and values regarding screening?
4. Are there subgroups of the Canadian population who have a higher prevalence of depression or for whom it would be difficult to implement screening programs? Subgroup analysis that explores issues of burden of disease, screening rates and special implementation issues include:
    - Aboriginal
    - Rural or remote-dwelling populations
    - Other ethnic groups
5. What are patient preferences and values for treatment interventions (antidepressants and/or psychotherapy) for depression?
6. What are the benefits and harms associated with the treatment (antidepressants and/or psychotherapy) for depression?

Rating Scheme for the Strength of the Recommendations

Grading of Recommendations

Recommendations in the guidelines prepared by the Canadian Task Force on Preventive Health Care (CTFPHC) are graded as either strong or weak according to the Grading of Recommendations Assessment, Development and Evaluation system (GRADE).

- Strong recommendations are those for which the task force is confident that the desirable effects of an intervention outweigh its undesirable effects (strong recommendation for an intervention) or that the undesirable effects of an intervention outweigh its desirable effects (strong recommendation against an intervention). A strong recommendation implies that most people will be best served by the recommended course of action.
- Weak recommendations are those for which the desirable effects probably outweigh the undesirable effects (weak recommendation for an intervention) or undesirable effects probably outweigh the desirable effects (weak recommendation against an intervention) but appreciable uncertainty exists. A weak recommendation implies that most people would want the recommended course of action, but many would not. For clinicians, this means they must recognize that different choices will be appropriate for each individual, and they must help each person arrive at a management decision consistent with his or her own values and preferences. Policy-making will require substantial debate and involvement of various stakeholders. Weak recommendations result when the balance between desirable and undesirable effects is small, the quality of evidence is lower, or there is more variability in the values and preferences of patients.

Cost Analysis

Resource Implications

Evidence from a modelling study in the United States suggested that one-time screening for depression may be cost-effective. However, this conclusion was based on a low-cost screening approach (maximum $6 per person) and on high remission rates associated with treatment (settings that can achieve full remission in 45% of patients and partial remission in an additional 25%). Given the lack of support for these assumptions, the validity of this conclusion is uncertain.

The time clinicians take to screen for depression reduces their availability to deliver other services of known clinical benefit (opportunity cost). Evidence from a Canadian modelling study suggests that routine screening to identify new cases of depression, resulting in increased rates of treatment, may not reduce the burden of depression. Instead, focusing efforts on reducing episodes of relapse (e.g., through long-term treatment in patients with known depression) may be a more efficient use of resources.

Method of Guideline Validation

Comparison with Guidelines from Other Groups

External Peer Review

Internal Peer Review

Description of Method of Guideline Validation

The recommendations were revised and approved by the entire task force and underwent external review by experts in the field and by stakeholders. A listing of organizational stakeholders and academic peer-reviewers that reviewed the guideline can be found in the original guideline document under the Acknowledgements section.

Table 2 in the original guideline document provides a comparison between the current and previous task force guidelines, as well as recommendations from other groups.

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of supporting evidence is identified and graded for each recommendation (see the "Major Recommendations" field).

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

Appropriate use of screening for depression in adults

Potential Harms

Potential harms of screening include false-positive diagnoses, with subsequent unnecessary treatment; adverse effects of medical therapy among people correctly identified as having depression; and the consequences of labelling and stigma.

Qualifying Statements

Qualifying Statements

- The studies that were reviewed in the original guideline document evaluated the effectiveness of the community-based depression screening programs which incorporated screening for depression, follow-up with mental health care or psychiatric treatment, and health education in the community setting in rural Japan with higher than average rates of suicide. As such, the observed reduction in suicide rates or recovery from depression cannot be attributed solely to the screening component of these programs. The findings of this review are affected by the limitations of the included literature. The search was limited to papers written in English or French. There is the potential that the guideline developers may have missed the opportunity to analyze data from papers written in other languages.
- The decision to recommend against screening was based on the lack of evidence on the benefits and harms of routinely screening asymptomatic adults. Despite the lack of evidence, the Canadian Task Force on Preventive Health Care (CTFPHC) had concerns about the potential harms of screening (e.g., false positives). In the absence of a demonstrated benefit of screening, and considering the potential harms, the CTFPHC recommends not routinely screening asymptomatic adults from average and increased risk groups.
- The views of the funding bodies have not influenced the content of the guideline; competing interests have been recorded and addressed. The views expressed in this article are those of the authors and do not represent those of the Public Health Agency of Canada.

Implementation of the Guideline

Description of Implementation Strategy

Considerations for Implementation

Patients with Clinical Clues to Depression

Screening for depression refers to the detection of depression among patients with no apparent symptoms. Yet, clinicians can use symptoms of depression (e.g., insomnia, low mood, anhedonia and suicidal thoughts) to identify patients with potential depression. Evidence suggests that detecting depression based on clinical symptoms tends to identify patients with more severe depression, who may be more likely to benefit from treatment. Clinicians should be alert to the possibility of depression in patients with clinical clues, especially those at increased risk of depression, and implement treatment as appropriate when depression is diagnosed.

Patient Preferences

Although there was high variability in patient preferences and values, patients generally consider screening for depression to be important and the screening tools to be acceptable. However, most studies of the acceptability of screening for depression that were identified in the systematic review focused on perinatal women. There was some evidence that any treatment in identified cases should be culturally sensitive and that matching treatment to patient preferences improves outcomes.

Integrated Staff-Assisted Systems

Integrated staff-assisted systems engage case managers, care support and coordination staff, or social workers, who play a central role in working with primary care physicians, mental health specialists and nurse practitioners to provide depression management and follow-up. Evidence suggests that such integrated systems may be more effective than usual care in increasing the likelihood of successful treatment of depression. However, it is unclear whether screening is a necessary component of these programs. Nevertheless, clinicians practising in a setting where there are integrated staff-assisted systems may be more inclined to choose screening given that treatment is more likely to be effective in this setting.

Implementation Tools

Clinical Algorithm

Foreign Language Translations

Quick Reference Guides/Physician Guides

Resources

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Staying Healthy

IOM Domain

Effectiveness

Identifying Information and Availability

Bibliographic Source(s)

Joffres M, Jaramillo A, Dickinson J, Lewin G, Pottie K, Shaw E, Connor Gorber S, Tonelli M, Canadian Task Force on Preventive Health Care. Recommendations on screening for depression in adults. CMAJ. 2013 Jun 11;185(9):775-82. [42 references] PubMed

Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2005 Jan (revised 2013 Jun)

Guideline Developer(s)

Canadian Task Force on Preventive Health Care - National Government Agency [Non-U.S.]

Source(s) of Funding

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Guideline Committee

Canadian Task Force on Preventive Health Care (CTFPHC) Writing Group

Composition of Group That Authored the Guideline

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Financial Disclosures/Conflicts of Interest

None of the authors (members of the guidelines writing group) have declared competing interests.

Guideline Endorser(s)

College of Family Physicians of Canada - Professional Association

Guideline Status

This is the current release of the guideline.

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A complete list of planned reviews, updates and revisions is available under the What's New section at the Canadian Task Force on Preventive Health Care (CTFPHC) Web site .

Guideline Availability

Electronic copies: Available from the Canadian Task Force on Preventive Health Care (CTFPHC) Web site .

Print copies: Available from the Canadian Task Force on Preventive Health Care 3050 RTF, University of Alberta, Edmonton, AB, T6G 2V2, Canada.

Availability of Companion Documents

The following are available:

> Screening for depression. Systematic review. Hamilton (ON): Evidence Review and Synthesis Centre, McMaster University; 2012 Nov. 94 p. Electronic copies: Available in Portable Document Format (PDF) from the Canadian Task Force on Preventive Health Care (CTFPHC) Web site .

Recommendations on screening for depression: list of studies excluded at full text screening. Hamilton (ON): Evidence Review and Synthesis Centre, McMaster University; 2012 Nov. 110 p. Electronic copies: Available in PDF from the CTFPHC Web site .

Recommendations on screening for depression. Appendices 1-6. Canadian Task Force on Preventive Health Care; 2013. Electronic copies: Available in PDF from the Canadian Medical Association Journal (CMAJ) Web site .

Screening for depression in primary care. Clinical algorithm and frequently asked questions. Canadian Task Force on Preventive Health Care; 2013. Electronic copies: Available in PDF in English and French from the CTFPHC Web site.

CTFPHC recommendation for screening for depression in adults. Clinician summary. Canadian Task Force on Preventive Health Care; 2013. 1 p. Electronic copies: Available in PDF in English and French from the CTFPHC Web site.

Canadian Task Force on Preventive Health Care methods manual. London (Ontario): Canadian Task Force on Preventive Health Care; 2011 Oct. 86 p. Electronic copies: Available in PDF in English and French from the CTFPHC Web site.

GRADE companion document to Task Force Guidelines. London (Ontario): Canadian Task Force on Preventive Health Care; 2011. 2 p. Electronic copies: Available in PDF in English and French from the CTFPHC Web site.

Patient Resources

None available

NGC Status

This NGC summary was completed by ECRI on August 10, 2005. The information was verified by the guideline developer on August 25, 2005. This summary was updated by ECRI Institute on November 9, 2007, following the U.S. Food and Drug Administration advisory on Antidepressant drugs. This NGC summary was updated by ECRI Institute on June 26, 2013. The updated information was verified by the guideline developer on July 15, 2013.

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